FASTA searches a protein or DNA sequence data bank version 3.3t05 March 30, 2000 Please cite: W.R. Pearson & D.J. Lipman PNAS (1988) 85:2444-2448 /tmp/fastaCAAyBaGwh: 3571 aa >qi | 40198414 | qb | AAR79125.1 | Sequence 2 from patent US 6656707 vs /tmp/fastaDAAzBaGwh library searching /tmp/fastaDAAzBaGwh library 3571 residues in 1 sequences FASTA (3.34 January 2000) function [optimized, BL50 matrix (15:-5)] ktup: 2 join: 47, opt: 35, gap-pen: -12/ -2, width: 16 Scan time: 0.117 The best scores are: opt SEQ ID NO:4 (3571) 25785 >>SEQ ID NO:4 (3571 aa) initn: 25785 init1: 25785 opt: 25785 Smith-Waterman score: 25785; 99.860% identity in 3571 aa overlap (1-3571:1-3571) 10 20 30 40 50 gi|401 MWPRLAFCCWGLALVSGWATFQQMSPSRNFSFRLFPETAPGAPGSIPAPPAPGDEAAGSR MWPRLAFCCWGLALVSGWATFQQMSPSRNFSFRLFPETAPGAPGSIPAPPAPGDEAAGSR SEO 10 20 3.0 40 50 60 70 80 90 100 110 gi | 401 VERLGQAFRRRVRLLRELSERLELVFLVDDSSSVGEVNFRSELMFVRKLLSDFPVVPTAT VERLGQAFRRRVRLLRELSERLELVFLVDDSSSVGEVNFRSELMFVRKLLSDFPVVPTAT SEQ 70 80 90 100 110 120 130 140 150 160 170 180 gi|401 RVAIVTFSSKNYVVPRVDYISTRRARQHKCALLLQEIPAISYRGGGTYTKGAFQQAAQIL RVAIVTFSSKNYVVPRVDYISTRRARQHKCALLLQEIPAISYRGGGTYTKGAFQQAAQIL SEO 130 140 150 160 170 180 190 200 210 220 230 240 qi | 401 LHARENSTKVVFLITDGYSNGGDPRPIAASLRDSGVEIFTFGIWQGNIRELNDMASTPKE SEO LHARENSTKVVFLITDGYSNGGDPRPIAASLRDSGVEIFTFGIWOGNIRELNDMASTPKE 190 200 210 220 230 240 250 270 280 260 290 300 gi | 401 EHCYLLHSFEEFEALARRALHEDLPSGSFIQDDMVHCSYLCDEGKDCCDRMGSCKCGTHT SEQ EHCYLLHSFEEFEALARRALHEDLPSGSFIQDDMVHCSYLCDEGKDCCDRMGSCKCGTHT

250

260

270

280

290

	310	320	330	340	350	360
gi 401	GHFECICEKGYYGKG	LQYECTACPSG	TYKPEGSPGG	ISSCIPCPDE	NHTSPPGSTS	PEDC
SEQ	::::::::::::::::::::::::::::::::::::::					
SEQ	310	320	330	340	350	360
	370	380	390	400	410	420
gi 401	VCREGYRASGQTCEL'					
SEQ	VCREGYRASGQTCEL					
	370	380	390	400	410	420
	430	440	450	460	470	480
g1 401	LPNGLWSGSESYCRV					
SEQ	LPNGLWSGSESYCRV	RTCPHLRQPKH	GHISCSTREM	LYKTTCLVAC	DEGYRLEGSD	
	430	440	450	460	470	480
	490	500	510	520	530	540
gi 401	QGNSQWDGPEPRCVE			-		
SEQ	::::::::::::::::::::::::::::::::::::::					
	490	500	510	520	530	540
	550	560	570	580	590	600
gi 401	MLRCTTSGKWNVGVQ		-			
	:::::::::::::::::::::::::::::::::::::::					
CEO.						
SEQ	MLRCTTSGKWNVGVQ					
SEQ	MLRCTTSGKWNVGVQ	AAVCKDVEAPQ	INCPKDIEAK	TLEQQDSANV	TWQIPTAKDN	SGEK
-	MLRCTTSGKWNVGVQA 550 610 VSVHVHPAFTPPYLF	AAVCKDVEAPQ 560 620 PVGDVAIVYTA	INCPKDIEAK 570 630 TDLSGNQASC	TLEQQDSANV 580 640 IFHIKVIDAE	TWQIPTAKDN 590 650 PPVIDWCRSP	SGEK 600 660 PPVQ
gi 401	MLRCTTSGKWNVGVQ2 550 610 VSVHVHPAFTPPYLF	AAVCKDVEAPQ 560 620 PVGDVAIVYTA	INCPKDIEAK 570 630 TDLSGNQASC	TLEQQDSANV 580 640 IFHIKVIDAE	TWQIPTAKDN 590 650 PPVIDWCRSP	SGEK 600 660 PPVQ
-	MLRCTTSGKWNVGVQA 550 610 VSVHVHPAFTPPYLF	AAVCKDVEAPQ 560 620 PVGDVAIVYTA	INCPKDIEAK 570 630 TDLSGNQASC	TLEQQDSANV 580 640 IFHIKVIDAE	TWQIPTAKDN 590 650 PPVIDWCRSP	SGEK 600 660 PPVQ
gi 401	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFI ::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA :.::::::	INCPKDIEAK 570 630 TDLSGNQASC :::::::	TLEQQDSANV 580 640 IFHIKVIDAE :::::::	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::	SGEK 600 660 PPVQ ::::
gi 401 SEQ	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFZ ::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA :.::::::: PIGDVAIVYTA 620 680 SDNSGAELVIT	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI
gi 401 SEQ gi 401	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFT ::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA :.::::::: PIGDVAIVYTA 620 680 SDNSGAELVIT	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI ::::
gi 401 SEQ	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFZ ::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA :.::::::: PIGDVAIVYTA 620 680 SDNSGAELVIT	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI ::::
gi 401 SEQ gi 401	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFI ::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA 620 680 SDNSGAELVIT SDNSGAELVIT	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP ::::::::	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA :::::::	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC: ::::::::	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI ::::
gi 401 SEQ gi 401 SEQ	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFI 610 670 VSEKVHAASWDEPQFS 670 730 VIKGSPCEIPFTPVNK	AAVCKDVEAPQ 560 620 PVGDVAIVYTA 620 680 SDNSGAELVIT 650NSGAELVIT 680 740 GDFICTPDNTG	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP :::::::: RSHTQGDLFP 690 750 VNCTLTCLEG	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA :::::::: QGETIVQYTA 700 760 YDFTEGSTDK	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC: TDPSGNNRTC: 710 770 YYCAYEDGVW	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI :::: DIHI 720 780 KPTY
gi 401 SEQ gi 401 SEQ	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFI 610 670 VSEKVHAASWDEPQFI 670 730 VIKGSPCEIPFTPVNC	AAVCKDVEAPQ 560 620 PVGDVAIVYTA 620 680 SDNSGAELVIT 680 740 GDFICTPDNTG	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP ::::::::: RSHTQGDLFP 690 750 VNCTLTCLEG	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA 700 760 YDFTEGSTDK ::::::::	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC: TDPSGNNRTC: 710 770 YYCAYEDGVW::::::::	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI :::: DIHI 720 780 KPTY ::::
gi 401 SEQ gi 401 SEQ	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFI 610 670 VSEKVHAASWDEPQFS 670 730 VIKGSPCEIPFTPVNK	AAVCKDVEAPQ 560 620 PVGDVAIVYTA 620 680 SDNSGAELVIT 680 740 GDFICTPDNTG	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP ::::::::: RSHTQGDLFP 690 750 VNCTLTCLEG	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA 700 760 YDFTEGSTDK ::::::::	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC: TDPSGNNRTC: 710 770 YYCAYEDGVW::::::::	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI :::: DIHI 720 780 KPTY ::::
gi 401 SEQ gi 401 SEQ gi 401 SEQ	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFI 610 670 VSEKVHAASWDEPQFS 670 730 VIKGSPCEIPFTPVNC 1::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA 620 680 SDNSGAELVIT 680 740 GDFICTPDNTG 111111111111111111111111111111111111	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP :::::::: RSHTQGDLFP 690 750 VNCTLTCLEG :::::::: VNCTLTCLEG 750 810	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA 700 760 YDFTEGSTDK :::::::: YDFTEGSTDK 760 820	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC: :::::::: TDPSGNNRTC: 710 770 YYCAYEDGVW: ::::::::: YYCAYEDGVW: 770 830	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI :::: DIHI 720 780 KPTY :::: KPTY 780
gi 401 SEQ gi 401 SEQ gi 401 SEQ	MLRCTTSGKWNVGVQ2 550 610 VSVHVHPAFTPPYLF1 ::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA 620 680 SDNSGAELVIT 680 740 SDFICTPDNTG 740 3DFICTPDNTG 740 800 800 GFKSFEMFYKA	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP :::::::: RSHTQGDLFP 690 750 VNCTLTCLEG :::::::: VNCTLTCLEG 750 810 ARCDDTDLMK	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA :::::::: QGETIVQYTA 700 760 YDFTEGSTDK ::::::::: YDFTEGSTDK 760 820 KFSEAFETTL	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC 710 770 YYCAYEDGVW :::::::: YYCAYEDGVW 770 830 GKMVPSFCSD	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI 720 780 KPTY :::: KPTY 780 840 AEDI
gi 401 SEQ gi 401 SEQ gi 401 SEQ	MLRCTTSGKWNVGVQZ 550 610 VSVHVHPAFTPPYLFI 610 670 VSEKVHAASWDEPQFS 670 730 VIKGSPCEIPFTPVNC 1::::::::::::::::::::::::::::::::::::	AAVCKDVEAPQ 560 620 PVGDVAIVYTA 620 680 SDNSGAELVIT 680 740 SDFICTPDNTG 740 800 SFKSFEMFYKA	INCPKDIEAK 570 630 TDLSGNQASC :::::::: TDLSGNQASC 630 690 RSHTQGDLFP :::::::: RSHTQGDLFP 690 750 VNCTLTCLEG :::::::: VNCTLTCLEG 750 810 ARCDDTDLMK :::::::::	TLEQQDSANV 580 640 IFHIKVIDAE :::::::: IFHIKVIDAE 640 700 QGETIVQYTA :::::::: QGETIVQYTA 700 760 YDFTEGSTDK ::::::::: YDFTEGSTDK 760 820 KFSEAFETTL ::::::::	TWQIPTAKDN 590 650 PPVIDWCRSP :::::::: PPVIDWCRSP 650 710 TDPSGNNRTC 710 770 YYCAYEDGVW ::::::::: YYCAYEDGVW 770 830 GKMVPSFCSD ::::::::	SGEK 600 660 PPVQ :::: PPVQ 660 720 DIHI 720 780 KPTY :::: KPTY 780 840 AEDI ::::

- ما ا	850	860	870	880	890	900
g1 401	DCRLEENLTKKY(
SEQ	DCRLEENLTKKY					
	850	860	870	880	890	900
	910	920	930	940	950	960
gi 401	SRIKRSAPLSDY					
- ,	::::::::::			::::::::		::::::
SEQ	SRIKRSAPLSDYI					
	910	920	930	940	950	960
	970	980	990	1000	1010	1020
gi 401	PMYSFQLASEIL:					
SEQ	PMYSFQLASEIL					
	970	980	990	1000	1010	1020
	1000	1046	1050	1000	1050	
ai 401	1030 GSYQDEEGQLECI	1040 CLCPSGMYTEYI	1050 HSRNISDCK	1060 AOCKOGTYSYS	1070 SGLETCESCE	1080
9-1-0-	::::::::::::::::					
SEQ	GSYQDEEGQLEC					
	1030	1040	1050	1060	1070	1080
	1090	1100	1110	1120	1130	1140
gi 401	FGSRSCLSCPENT	rstvkrgavnis	ACGVPCPEG:	KFSRSGLMPC	HPCPRDYYQP	NAGKAFC
SEQ	ECCRECT CORNS					
SEQ.	FGSRSCLSCPENT	1100	1110	RESESCEMPCE 1120	1130	1140
~; l401	1150	1160	1170	1180	1190	1200
911401	LACPFYGTTPFAC					
SEQ	LACPFYGTTPFAC					
	1150	1160	1170	1180	1190	1200
	1210	1220	1230	1240	1250	1260
gi 401	PCHNSGTCQQLGF					
OTIO.	POUNTAGE COLUMN					
SEQ	PCHNSGTCQQLGF 1210	1220	1230	ECSPLPCLNNO 1240	1250	1260
			1200	1210	1230	1200
	1270	1280	1290	1300	1310	1320
g1 401	YTGQRCEENINEC					
SEQ	YTGQRCEENINEC					
	1270	1280	1290	1300	1310	1320
	1330	1340	1350	1360	1370	1380
gi 401	VCEDQVGGFLCKC					
	:::::::::::::::::::::::::::::::::::::::		:::::::		::::::::	::::::
SEQ	VCEDQVGGFLCKC					
	1330	1340	1350	1360	1370	1380

	1390	1400	1410	1420	1430	1440
gi 401	ELNINECQSNPCRN					
	:::::::::::::::::::::::::::::::::::::::					
SEQ	ELNINECQSNPCRN					
	1390	1400	1410	1420	1430	1440
	1450	1460	1470	1480	1490	1500
ai 401	LDGMLPSLHALTCT					
9-1-0-	:::::::::::::::::::::::::::::::::::::::					
SEQ	LDGMLPSLHALTCT					
	1450	1460	1470	1480	1490	1500
. 1	1510	1520	1530	1540	1550	1560
gi 401	NCPSVNDGRWHHIA:					
270						
SEQ	NCPSVNDGRWHHIA	TWTSANGIWI 1520	(VYIDGKLSD) 1530		IPGGGALVLO 1550	
	1510	1520	1530	1540	1550	1560
	1570	1580	1590	1600	1610	1620
ai 401	GEGFSPAESFVGSIS					
J-	:::::::::::::::::::::::::::::::::::::::					
SEQ	GEGFSPAESFVGSIS					
	1570	1580	1590	1600	1610	1620
	1630	1640	1650	1660	1670	1680
gi 401	IDSKSIFCSDCPRLO					
		: : : : : : : : : :				
CEO	TREVETEGERARDI					
SEQ	IDSKSIFCSDCPRLO	GSVPHLRTAS	SEDLKPGSKVI	NLFCDPGFQL	VGNPVQYCLI	NQGQWTQ
SEQ	IDSKSIFCSDCPRLO					
SEQ		GSVPHLRTAS	SEDLKPGSKVI	NLFCDPGFQL	VGNPVQYCLI	NQGQWTQ
	1630	GGSVPHLRTAS 1640 1700	SEDLKPGSKVI 1650 1710	NLFCDPGFQL 1660 1720	VGNPVQYCLI 1670 1730	NQGQWTQ 1680 1740
	1630 1690	GGSVPHLRTAS 1640 1700 PLENGFHSADI	BEDLKPGSKVI 1650 1710 DFYAGSTVTY	NLFCDPGFQL 1660 1720 QCNNGYYLLG	VGNPVQYCLI 1670 1730 DSRMFCTDNO	NQGQWTQ 1680 1740 GSWNGVS
	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	GGSVPHLRTAS 1640 1700 PLENGFHSADI ::::::::	SEDLKPGSKVI 1650 1710 DFYAGSTVTY(::::::::: DFYAGSTVTY(NLFCDPGFQL 1660 1720 QCNNGYYLLG ::::::::	VGNPVQYCLI 1670 1730 DSRMFCTDNG	NQGQWTQ 1680 1740 GSWNGVS
gi 401	1630 1690 PLPHCERISCGVPPI	GGSVPHLRTAS 1640 1700 PLENGFHSADI	SEDLKPGSKVI 1650 1710 DFYAGSTVTY	NLFCDPGFQL 1660 1720 QCNNGYYLLG	VGNPVQYCLI 1670 1730 DSRMFCTDNG	NQGQWTQ 1680 1740 GSWNGVS
gi 401	1630 1690 PLPHCERISCGVPPI ::::::::::: PLPHCERISCGVPPI 1690	GGSVPHLRTAS 1640 1700 PLENGFHSADI ::::::::: PLENGFHSADI 1700	BEDLKPGSKVI 1650 1710 PFYAGSTVTYO :::::::: PFYAGSTVTYO 1710	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720	VGNPVQYCLI 1670 1730 DSRMFCTDNO ::::::: DSRMFCTDNO 1730	NQGQWTQ 1680 1740 GSWNGVS :::::: GSWNGVS 1740
gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	GGSVPHLRTAS 1640 1700 PLENGFHSADI ::::::::: PLENGFHSADI 1700 1760	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO ::::::::::::::::::::::::::::::::::::	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720 1780	VGNPVQYCLI 1670 1730 DSRMFCTDNO :::::::: DSRMFCTDNO 1730 1790	1740 1680 1740 GSWNGVS ::::::::::::::::::::::::::::::::::::
gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::: PLPHCERISCGVPPI 1690 1750 PSCLDVDECAVGSDO	GGSVPHLRTAS 1640 1700 PLENGFHSADI LENGFHSADI 1700 1760 CSEHASCLNVI	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1:::::::: DFYAGSTVTYO 1710 1770 DGSYICSCVPI	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720 1780 PYTGDGKNCA	VGNPVQYCLI 1670 1730 DSRMFCTDNO ::::::: DSRMFCTDNO 1730 1790 EPIKCKAPGI	1740 SSWNGVS :::::: GSWNGVS 1740 1800 NPENGHS
gi 401 SEQ gi 401	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	GGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720 1780 PYTGDGKNCA	VGNPVQYCLI 1670 1730 DSRMFCTDNO :::::::: DSRMFCTDNO 1730 1790 EPIKCKAPGI	1740 1680 1740 GSWNGVS ::::::: GSWNGVS 1740 1800 NPENGHS
gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::: PLPHCERISCGVPPI 1690 1750 PSCLDVDECAVGSDO	GGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720 1780 PYTGDGKNCA	VGNPVQYCLI 1670 1730 DSRMFCTDNO :::::::: DSRMFCTDNO 1730 1790 EPIKCKAPGI	1740 1680 1740 GSWNGVS ::::::: GSWNGVS 1740 1800 NPENGHS
gi 401 SEQ gi 401	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	GGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1710 1770 DGSYICSCVPI	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720 1780 PYTGDGKNCA ::::::::	VGNPVQYCLI 1670 1730 DSRMFCTDNO 1730 1790 EPIKCKAPGI ::::::::	1740 1740 GSWNGVS 1740 1800 1800 NPENGHS 1740
gi 401 SEQ gi 401	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	GGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1710 1770 DGSYICSCVPI	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720 1780 PYTGDGKNCA ::::::::	VGNPVQYCLI 1670 1730 DSRMFCTDNO 1730 1790 EPIKCKAPGI ::::::::	1740 1740 GSWNGVS 1740 1800 1800 NPENGHS 1740
gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1760 1820	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830	NLFCDPGFQL 1660 1720 CCNNGYYLLG :::::::: CCNNGYYLLG 1720 1780 PYTGDGKNCA :::::::: PYTGDGKNCA 1780 1840	1670 1730 DSRMFCTDNO :::::::: DSRMFCTDNO 1730 1790 EPIKCKAPGN :::::::: EPIKCKAPGN 1790 1850	1740 1740 GSWNGVS ::::::::::::::::::::::::::::::::::::
gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVT	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 PKITCLESGEV 1:::::::	NLFCDPGFQL 1660 1720 QCNNGYYLLG 1720 1780 PYTGDGKNCA 1780 PYTGDGKNCA 1780 1840 WNHLIPYCKA	1670 1730 DSRMFCTDNG :::::::: DSRMFCTDNG 1730 1790 EPIKCKAPGN :::::::: EPIKCKAPGN 1790 1850 VSCGKPAIPN ::::::::	1740 1740 3SWNGVS 1740 1800 1800 NPENGHS 1800 1860 ENGCIEE :::::
gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVT	SEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 CKITCLESGEV EXITCLESGEV EXITCLESGEV EXITCLESGEV	NLFCDPGFQL 1660 1720 QCNNGYYLLG 1720 1780 PYTGDGKNCA 1780 1780 1780 1840 NNHLIPYCKA	VGNPVQYCLI 1670 1730 DSRMFCTDNO :::::::: DSRMFCTDNO 1730 1790 EPIKCKAPGI :::::::: EPIKCKAPGI 1790 1850 VSCGKPAIPI ::::::::	1740 1740 3SWNGVS 1740 1800 1800 NPENGHS 1800 1860 ENGCIEE ENGCIEE
gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVT	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 PKITCLESGEV 1:::::::	NLFCDPGFQL 1660 1720 QCNNGYYLLG 1720 1780 PYTGDGKNCA 1780 PYTGDGKNCA 1780 1840 WNHLIPYCKA	1670 1730 DSRMFCTDNG :::::::: DSRMFCTDNG 1730 1790 EPIKCKAPGN :::::::: EPIKCKAPGN 1790 1850 VSCGKPAIPN ::::::::	1740 1740 3SWNGVS 1740 1800 1800 NPENGHS 1800 1860 ENGCIEE :::::
gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 PKITCLESGEV 1830	NLFCDPGFQL 1660 1720 QCNNGYYLLG 1720 1780 PYTGDGKNCA 1780 1840 WNHLIPYCKA WNHLIPYCKA 1840	1670 1730 DSRMFCTDNG :::::::: DSRMFCTDNG 1730 1790 EPIKCKAPGN :::::::: EPIKCKAPGN 1790 1850 VSCGKPAIPN :::::::: VSCGKPAIPN 1850	1740 1740 GSWNGVS 1740 1800 NPENGHS 1800 1860 ENGCIEE 1860
gi 401 SEQ gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVT 1820 1820	BEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 TKITCLESGEN 1830 1890	NLFCDPGFQL 1660 1720 QCNNGYYLLG :::::::: QCNNGYYLLG 1720 1780 PYTGDGKNCA ::::::::: PYTGDGKNCA 1780 1840 NNHLIPYCKA ::::::::: NHLIPYCKA 1840 1900	VGNPVQYCLI 1670 1730 DSRMFCTDNO 1730 1790 EPIKCKAPGI 1790 1850 VSCGKPAIPI 1850 1910	1740 1740 3SWNGVS 1740 1800 1800 NPENGHS 1800 1860 ENGCIEE 1860 1920
gi 401 SEQ gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 1880 CGYTLAGDKES	SEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 TKITCLESGEV 1830 1890 SCLANSSWSI	NLFCDPGFQL 1660 1720 CCNNGYYLLG :::::::: CCNNGYYLLG 1720 1780 PYTGDGKNCA :::::::: PYTGDGKNCA 1780 1840 NNHLIPYCKA ::::::::: NNHLIPYCKA 1840 1900 HSPPVCEPVK	1670 1730 DSRMFCTDNO :::::::: DSRMFCTDNO 1730 1790 EPIKCKAPGN ::::::: EPIKCKAPGN 1790 1850 VSCGKPAIPN :::::::: VSCGKPAIPN 1850 1910 CSSPENINNO	1740 1740 3SWNGVS 1740 1800 1800 NPENGHS 1800 1860 ENGCIEE 1860 1920 GKYILSG
gi 401 SEQ gi 401 SEQ gi 401 SEQ	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI	SEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 TKITCLESGEV 1830 1890 SSCLANSSWSI ::::::::	NLFCDPGFQL 1660 1720 CCNNGYYLLG :::::::: CCNNGYYLLG 1720 1780 PYTGDGKNCA :::::::: PYTGDGKNCA 1780 1840 NNHLIPYCKA ::::::::: NNHLIPYCKA 1840 1900 HSPPVCEPVK ::::::::	VGNPVQYCLI 1670 1730 DSRMFCTDNO 1730 1790 EPIKCKAPGI ::::::: EPIKCKAPGI 1790 1850 VSCGKPAIPI :::::::: VSCGKPAIPI 1850 1910 CSSPENINNO ::::::::	1740 1740 3SWNGVS 1740 1800 1800 NPENGHS 1800 1860 ENGCIEE 1860 1920 GKYILSG
gi 401 SEQ gi 401 SEQ gi 401	1630 1690 PLPHCERISCGVPPI :::::::::::::::::::::::::::::::::::	EGSVPHLRTAS 1640 1700 PLENGFHSADI 1700 1760 CSEHASCLNVI 1760 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI 1820 CQEGYQLMGVI	SEDLKPGSKVI 1650 1710 DFYAGSTVTYO 1710 1770 DGSYICSCVPI 1770 1830 TKITCLESGEV 1830 1890 SSCLANSSWSI ::::::::	NLFCDPGFQL 1660 1720 CCNNGYYLLG :::::::: CCNNGYYLLG 1720 1780 PYTGDGKNCA :::::::: PYTGDGKNCA 1780 1840 NNHLIPYCKA ::::::::: NNHLIPYCKA 1840 1900 HSPPVCEPVK ::::::::	VGNPVQYCLI 1670 1730 DSRMFCTDNO 1730 1790 EPIKCKAPGI ::::::: EPIKCKAPGI 1790 1850 VSCGKPAIPI :::::::: VSCGKPAIPI 1850 1910 CSSPENINNO ::::::::	1740 1740 3SWNGVS 1740 1800 1800 NPENGHS 1800 1860 ENGCIEE 1860 1920 GKYILSG

gi 401	1930 LTYLSTASYSCDTGY					
SEQ	LTYLSTASYSCDTGY					
ai 401	1990 FRNTVTYTCKEGYTL	2000 agi.dttect.ai	2010 DGKWSRSDOO	2020	2030 TVDHASPETA	2040 HRLEG
91 401	:::::::::::::::					
SEQ	FRNTVTYTCKEGYTL					
	1990	2000	2010	2020	2030	2040
gi 401	2050 DIAFYYCSDGYSLADI					
SEQ	DIAFYYCSDGYSLADI					
	2050	2060	2070	2080	2090	2100
gi 401	2110 KFAAGSVVSFKCMEG	2120 FVLNTSAKIE	2130 CMRGGQWNPS:	2140 PMSIQCIPVR	2150 CGEPPSIMNG	2160 YASGS
CEO.	::::::::::::::::::::::::::::::::::::::					
SEQ	2110	2120	ZMRGGQWNPS. 2130	2140	2150	2160
ai 401	2170 NYSFGAMVAYSCNKG	2180 Evikarkkem	2190	2200	2210 PDRVENCEL	2220 Futtc
911401	:::::::::::::					
SEQ	NYSFGAMVAYSCNKG	FYIKGEKKST	CEATGQWSSP	I PTCHPVSCG	EPPKVENGFL	EHTTG
	2170	2180	2190	2200	2210	2220
	2230	2240	2250	2260	2270	2280
gi 401	RIFESEVRYQCNPGY					
SEQ	RIFESEVRYQCNPGY					
DIQ	2230	2240	2250	2260	2270	2280
	2200	2200	2210	2220	2220	2240
gi 401	2290 EVGSKVQFFCNEGYEI	2300 LVGDSSWTCOI	2310 KSGKWNKKSNI	2320 PKCMPAKCPE	2330 PPLLENOLVL	2340 KELTT
J ,						
SEQ	EVGSKVQFFCNEGYEI					
	2290	2300	2310	2320	2330	2340
	2350	2360	2370	2380	2390	2400
gi 401	EVGVVTFSCKEGHVL	· -				
SEQ	EVGVVTFSCKEGHVL					
	2350	2360	2370	2380	2390	2400
	2410	2420	2430	2440	2450	2460
gi 401	GSTVKYSCVGGFFLR			_		
- 1	:::::::::::::::::::::::::::::::::::::::					
SEQ	GSTVKYSCVGGFFLRO					
	2410	2420	2430	2440	2450	2460

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	2470	2480	2490	2500	2510	2520
gi 401	TALYTCKPGFEL					
SEO	TALYTCKPGFEL					
SEQ	2470	2480	2490	2500	2510	2520
				2411		
	2530	2540	2550	2560	2570	2580
gi 401	TYSCNRGFRLEG					
ano	#WGGWDGEDIEG					
SEQ	TYSCNRGFRLEGI 2530	PSALTCLETGD 2540	WDVDAPSCNA 2550	1HCDSPQP1E 2560	INGFVEGADY: 2570	2580
	2550	2340	2330	2300	2370	2300
	2590	2600	2610	2620	2630	2640
gi 401	SCFPGFQVAGHAI					-
ano	:::::::::::::::::::::::::::::::::::::::					
SEQ	SCFPGFQVAGHAI 2590	MQTCEESGWSS 2600	2610	GLPPHIDFGL 2620	2630	YFEQEDDM 2640
	2390	2000	2610	2620	2630	2640
	2650	2660	2670	2680	2690	2700
gi 401	MEVPYVTPHPPY	HLGAVAKTWEN	TKESPATHSS	NFLYGTMVSY	TCNPGYELL	GNPVLICQ
	:::::::::::::::::::::::::::::::::::::::					
SEQ	MEVPYVTPHPPYI					-
	2650	2660	2670	2680	2690	2700
	2710	2720	2730	2740	2750	2760
gi 401	EDGTWNGSAPSC	ISIECDLPTAP	ENGFLRFTET	SMGSAVQYSC	KPGHILVGS	OLRLCLEN
		:::::::::::				
SEQ	EDGTWNGSAPSC	ISIECDLPTAP	ENGFLRFTET	SMGSAVQYSC	KPGHILAGSI	OLRLCLEN
SEQ						
SEQ	EDGTWNGSAPSC	ISIECDLPTAP	ENGFLRFTET: 2730	SMGSAVQYSC 2740	KPGHILAGSI 2750	OLRLCLEN 2760
~	EDGTWNGSAPSC	ISIECDLPTAP 2720 2780	ENGFLRFTET: 2730 2790	SMGSAVQYSC 2740 2800	KPGHILAGSI 2750 2810	2760 2820
gi 401	EDGTWNGSAPSC 2710 2770 RKWSGASPRCEAL	ISIECDLPTAP 2720 2780 ISCKKPNPVMN	ENGFLRFTET: 2730 2790 GSIKGSNYTY:	SMGSAVQYSC 2740 2800 LSTLYYECDF	KPGHILAGSI 2750 2810 GYVLNGTERI	DLRLCLEN 2760 2820 RTCQDDKN :::::::
~	2710 2770 RKWSGASPRCEAL ::::::::::::::::::::::::::::::::::::	ISIECDLPTAP 2720 2780 ISCKKPNPVMN :::::::::	ENGFLRFTET: 2730 2790 GSIKGSNYTY: :::::::: GSIKGSNYTY	SMGSAVQYSC 2740 2800 LSTLYYECDF :::::::: LSTLYYECDF	KPGHILAGSI 2750 2810 GYVLNGTERI ::::::: GYVLNGTERI	2760 2820 RTCQDDKN ::::::
gi 401	EDGTWNGSAPSC 2710 2770 RKWSGASPRCEAL	ISIECDLPTAP 2720 2780 ISCKKPNPVMN	ENGFLRFTET: 2730 2790 GSIKGSNYTY:	SMGSAVQYSC 2740 2800 LSTLYYECDF	KPGHILAGSI 2750 2810 GYVLNGTERI	DLRLCLEN 2760 2820 RTCQDDKN :::::::
gi 401	2710 2770 RKWSGASPRCEAL ::::::::::::::::::::::::::::::::::::	ISIECDLPTAP 2720 2780 ISCKKPNPVMN ::::::::: ISCKKPNPVMN 2780	ENGFLRFTET 2730 2790 GSIKGSNYTY :::::::: GSIKGSNYTY 2790	SMGSAVQYSC 2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800	KPGHILAGSI 2750 2810 GYVLNGTERI ::::::: GYVLNGTERI	2820 2760 2820 RTCQDDKN ::::::: RTCQDDKN 2820
gi 401 SEQ	EDGTWNGSAPSC 2710 2770 RKWSGASPRCEAL :::::::::::: RKWSGASPRCEAL 2770	ISIECDLPTAP 2720 2780 ISCKKPNPVMN :::::::::: ISCKKPNPVMN 2780 2840	2730 2790 GSIKGSNYTY :::::::::::::::::::::::::::::::::::	SMGSAVQYSC 2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860	KPGHILAGSI 2750 2810 GYVLNGTERI :::::::: GYVLNGTERI 2810 2870	2820 2760 2820 RTCQDDKN ::::::: RTCQDDKN 2820 2880
gi 401 SEQ gi 401	EDGTWNGSAPSC 2710 2770 RKWSGASPRCEAR ::::::::::::::::::::::::::::::::::::	2720 2780 2780 ISCKKPNPVMN SINGER STATE OF THE PROPERTY OF	2730 2790 2790 GSIKGSNYTY :::::::: GSIKGSNYTY 2790 2850 VRGDEYTFQK	SMGSAVQYSC 2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVO	2820 RTCQDDKN ETCQDDKN 2820 2820 2880 CLANGSWS
gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAT ::::::::::::::::::::::::::::::::::::	2720 2780 2780 SCKKPNPVMN SCKKPNPVMN 2780 2840 CSSPPVSANGQ CSSPPVSANGQ	2730 2790 GSIKGSNYTY :::::::: GSIKGSNYTY 2790 2850 VRGDEYTFQKI	SMGSAVQYSC 2740 2800 LSTLYYECDF 2800 2860 EIEYTCNEGF EIEYTCNEGF	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVO	2820 RTCQDDKN 2820 RTCQDDKN 2820 2880 CLANGSWS CLANGSWS
gi 401 SEQ gi 401	EDGTWNGSAPSC 2710 2770 RKWSGASPRCEAR ::::::::::::::::::::::::::::::::::::	2720 2780 2780 ISCKKPNPVMN SINGER STATE OF THE PROPERTY OF	2730 2790 2790 GSIKGSNYTY :::::::: GSIKGSNYTY 2790 2850 VRGDEYTFQK	SMGSAVQYSC 2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVO	2820 RTCQDDKN ETCQDDKN 2820 2820 2880 CLANGSWS
gi 401 SEQ gi 401	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAR ::::::::::::::::::::::::::::::::::::	2720 2780 SCKKPNPVMN SCKKPNPVMN 2780 2840 CSSPPVSANGQ SSSPPVSANGQ 2840	2730 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 VRGDEYTFQKI 2850	2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF :::::::: EIEYTCNEGF 2860	2750 2810 2810 GYVLNGTERI 2810 2870 LLEGARSRVG 2870	2820 RTCQDDKN 2820 RTCQDDKN 2820 2880 CLANGSWS ::::::: CLANGSWS 12880
gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAR ::::::::::::::::::::::::::::::::::::	2720 2780 2780 ISCKKPNPVMN 2780 2840 2840 CSSPPVSANGQ 2840 2840 2840	2730 2790 GSIKGSNYTY :::::::: GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 VRGDEYTFQKI 2850 2910	2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF :::::::: EIEYTCNEGF 2860 2920	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVO 2870 LLEGARSRVO 2870	2820 2820 RTCQDDKN 2820 2820 2880 CLANGSWS 12880 2880 2880
gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAR ::::::::::::::::::::::::::::::::::::	2720 2780 2780 ISCKKPNPVMN 2780 2840 2840 CSSPPVSANGQ 2840 2840 2900 CPPQLANGVTE	2730 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 VRGDEYTFQKI 2850 2910 GLDYGFMKEV	SMGSAVQYSC 2740 2800 LSTLYYECDF ::::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF ::::::::: EIEYTCNEGF 2860 2920 TFHCHEGYIL	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVC 2870 LLEGARSRVC 2870 2930 HGAPKLTCQS	2820 RTCQDDKN 2820 2820 2820 2820 2880 CLANGSWS ::::::: CLANGSWS 2880 2940 EDGNWDAE
gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAT 2770 2830 WDEDEPICIPVDC 2830 WDEDEPICIPVDC 2830 2890 GATPDCVPVRCAT GATPDCVPVRCAT	2720 2780 2780 SCKKPNPVMN 2780 2780 2840 CSSPPVSANGQ 2840 2840 2900 CPPQLANGVTE	2730 2790 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 VRGDEYTFQKI 2850 2910 GLDYGFMKEV ::::::::: GLDYGFMKEV	SMGSAVQYSC 2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF 2860 2920 IFHCHEGYIL :::::::: IFHCHEGYIL	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVO 2870 LLEGARSRVO 2870 400 400 400 400 400 400 400	2820 RTCQDDKN 2820 2880 CLANGSWS 1:::::: CLANGSWS 2880 2940 EDGNWDAE EDGNWDAE
gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAT ::::::::::::::::::::::::::::::::::::	2720 2780 2780 ISCKKPNPVMN 2780 2840 2840 CSSPPVSANGQ 2840 2840 2900 PPQLANGVTE	2730 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 VRGDEYTFQKI 2850 2910 GLDYGFMKEV ::::::::	SMGSAVQYSC 2740 2800 LSTLYYECDF ::::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF ::::::::: EIEYTCNEGF 2860 2920 IFHCHEGYIL	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVO 2870 2930 HGAPKLTCQS	2820 RTCQDDKN 2820 2820 2820 2880 CLANGSWS 11111111111111111111111111111111111
gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAT: :::::::::::::::::::::::::::::::::::	2720 2780 2780 SCKKPNPVMN 15CKKPNPVMN 2780 2840 2840 CSSPPVSANGQ 15CSSPPVSANGQ 2840 2900 TPPQLANGVTE 15CPPQLANGVTE 2900	2730 2790 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 2850 2910 GLDYGFMKEV 2910 GLDYGFMKEV 2910	SMGSAVQYSC 2740 2800 LSTLYYECDF ::::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF ::::::::: EIEYTCNEGF 2860 2920 IFHCHEGYIL ::::::::	2810 2810 GYVLNGTERI 2810 2870 LLEGARSRVG 11::::::: LLEGARSRVG 2870 2930 HGAPKLTCQS 2930	2820 RTCQDDKN 2820 2820 2820 2820 2880 CLANGSWS 2880 CLANGSWS 2880 2940 SDGNWDAE ESDGNWDAE 2940
gi 401 SEQ gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAT 2770 2830 WDEDEPICIPVDC 2830 WDEDEPICIPVDC 2830 2890 GATPDCVPVRCAT 2890 2890 2950	2720 2780 2780 ISCKKPNPVMN 2780 2840 2840 CSSPPVSANGQ 2840 2900 PPPQLANGVTE 15PPQLANGVTE 2900 2960	2730 2790 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 VRGDEYTFQKI 2850 2910 GLDYGFMKEV 1:::::::: GLDYGFMKEV 2910 2910 2970	SMGSAVQYSC 2740 2800 LSTLYYECDF ::::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF 2860 2920 IFHCHEGYIL ::::::::::::::::::::::::::::::::::::	EKPGHILAGSI 2750 2810 GYVLNGTERI 2810 2870 LLEGARSRVO 2870 2930 HGAPKLTCQS 2930 2930	2820 2820 RTCQDDKN 2820 2880 2880 CLANGSWS 2880 2940 SDGNWDAE 2940 3000
gi 401 SEQ gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAT: :::::::::::::::::::::::::::::::::::	2720 2780 2780 SCKKPNPVMN 2780 2840 2840 2840 CSSPPVSANGQ 2840 2900 TPPQLANGVTE 2900 2960 EDLAHGFPNGF	2730 2790 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 2910 GLDYGFMKEV 2910 2970 SFIHGGHIQYG	2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF ::::::::: EIEYTCNEGF 2860 2920 TFHCHEGYIL :::::::: IFHCHEGYIL 2920 2980 QCFPGYKLHG	2810 2810 GYVLNGTERI 2810 2870 2810 2870 LLEGARSRVG 2870 2930 HGAPKLTCQS 2930 1990 NSSRRCLSNG	2820 RTCQDDKN 2820 2820 2820 2820 2880 CLANGSWS CLANGSWS 2880 2940 SDGNWDAE 2940 3000 GSWSGSSP
gi 401 SEQ gi 401 SEQ gi 401 SEQ	EDGTWNGSAPSC: 2710 2770 RKWSGASPRCEAT 2770 2830 WDEDEPICIPVDC 2830 2890 GATPDCVPVRCAT 2890 2890 GATPDCVPVRCAT 2890 2950 IPLCKPVNCGPPE	2720 2780 2780 SCKKPNPVMN 2780 2840 2840 CSSPPVSANGQ 2840 2900 PPQLANGVTE 2900 2960 EDLAHGFPNGF	2730 2790 2790 GSIKGSNYTY 2790 2850 VRGDEYTFQKI 2850 2910 GLDYGFMKEV 2910 2970 2970 SFIHGGHIQY ::::::::	2740 2800 LSTLYYECDF :::::::: LSTLYYECDF 2800 2860 EIEYTCNEGF :::::::: EIEYTCNEGF 2860 2920 TFHCHEGYIL 2920 2980 QCFPGYKLHG ::::::::	2810 2810 GYVLNGTERI 2810 2810 2810 2810 2870 LLEGARSRVG 2870 2930 HGAPKLTCQS 2930 2990 NSSRRCLSNG	2820 2820 RTCQDDKN 2820 2880 2880 CLANGSWS 2880 CLANGSWS 2880 2940 SDGNWDAE 2940 3000 GSWSGSSP

SEQ SCSPPSVANAVATGEAHTYESEVKLRCLEGYTMDTDTDTFTCQKDGRWFPERISCSPKK 3130 3140 3150 3160 3170 3180 3190 3100 3110 3120 31401 3120 3150 3160 3170 3080 3090 3100 3110 3120 3170 3080 3090 3100 3110 3120 3170 3080 3090 3100 3110 3120 3170 3180 3190 3100 3100 3170 3180 3100 3100 3170 3180 3190 3100 3100 3100 3170 3180 3190 3100 3100 3100 3100 3100 3100 310	
3070 3080 3090 3100 3110 3120	
SEQ	
3070 3080 3090 3100 3110 3120	
gi 401 SCGSPPSVANAVATGEAHTYESEVKLRCLEGYTMDTDTDTTFTCQKDGRWFPERISCSPKK SEQ SCGSPPSVANAVATGEAHTYESEVKLRCLEGYTMDTDTDTTFTCQKDGRWFPERISCSPKK 3130 3140 3150 3160 3170 3180 3190 3200 3210 3220 3230 3240 GPLPENITHILVHGDDFSVNRQVSVSCAEGYTFEGVNISVCQLDGTWEPPFSDESCSPVS SEQ CPLPENITHILVHGDDFSVNRQVSVSCAEGYTFEGVNISVCQLDGTWEPPFSDESCSPVS 3190 3200 3210 3220 3230 3240 GPLPENITHILVHGDDFSVNRQVSVSCAEGYTFEGVNISVCQLDGTWEPPFSDESCSPVS 3190 3200 3210 3220 3230 3240 SEQ CPLPENITHILVHGDDFSVNRQVSVSCAEGYTFEGVNISVCQLDGTWEPPFSDESCSPVS 3190 3260 3270 3280 3290 3300 GGKPESPEHGFVVGSKYTFESTIIYQCEPGYELEGNRERVCQENRQWSGGVAICKETRCE 3250 3260 3270 3280 3290 3300 GGKPESPEHGFVVGSKYTFESTIIYQCEPGYELEGNRERVCQENRQWSGGVAICKETRCE 3250 3300 3340 3350 3360 3310	
SEQ SCGSPPSVANAVATGEAHTYESEVKLRCLEGYTMDTDTDTTTTCQKDGRWFPERISCSPKK 3130 3140 3150 3160 3170 3180 gi 401 3190 3200 3210 3220 3230 3240 gi 401 CPLPENITHILVHGDDFSVNRQVSVSCAEGYTFEGVNISVCQLDGTWEPPFSDESCSPVS 3190 3200 3210 3220 3230 3240 gi 401 3250 3260 3270 3280 3290 3300 gi 401 CGKPESPEHGFVVGSKYTFESTIIYQCEPGYELEGNRERVCQENRQWSGGVAICKETRCE 3250 3260 3270 3280 3290 3300 gi 401 TPLEFLNGKADIENRTTGPNVVYSCNRGYSLEGPSEAHCTENGTWSHPVPLCKPNPCPVP 3310 3320 3330 3340 3350 3360	
3130 3140 3150 3160 3170 3180 3190 3200 3210 3220 3230 3240 gi 401 CPLPENITHILVHGDDFSVNRQVSVSCAEGYTFEGVNISVCQLDGTWEPPFSDESCSPVS SEQ CPLPENITHILVHGDDFSVNRQVSVSCAEGYTFEGVNISVCQLDGTWEPPFSDESCSPVS 3190 3200 3210 3220 3230 3240 3250 3260 3270 3280 3290 3300 gi 401 CGKPESPEHGFVVGSKYTFESTIIYQCEPGYELEGNRERVCQENRQWSGGVAICKETRCE SEQ CGKPESPEHGFVVGSKYTFESTIIYQCEPGYELEGNRERVCQENRQWSGGVAICKETRCE 3250 3260 3270 3280 3290 3300 gi 401 TPLEFLNGKADIENRTTGPNVVYSCNRGYSLEGPSEAHCTENGTWSHPVPLCKPNPCPVP	
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3370 3380 3390 3400 3410 3420 gi 401 FVIPENALLSEKEFYVDQNVSIKCREGFLLQGHGIITCNPDETWTQTSAKCEKISCGPPA	
SEQ FVIPENALLSEKEFYVDQNVSIKCREGFLLQGHGIITCNPDETWTQTSAKCEKISCGPPA 3370 3380 3390 3400 3410 3420	
3430 3440 3450 3460 3470 3480 gi 401 HVENAIARGVHYQYGDMITYSCYSGYMLEGFLRSVCLENGTWTSPPICRAVCRFPCQNGG	
SEQ HVENAIARGVHYQYGDMITYSCYSGYMLEGFLRSVCLENGTWTSPPICRAVCRFPCQNGG 3430 3440 3450 3460 3470 3480	
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gi 401 ICQRPNACSCPEGWMGRLCEEPICILPCLNGGRCVAPYQCDCPPGWTGSRCHTAVCQSPC	
SEQ ICQRPNACSCPEGWMGRLCEEPICILPCLNGGRCVAPYQCDCPPGWTGSRCHTAVCQSPC 3490 3500 3510 3520 3530 3540	

3571 residues in 1 query sequences 3571 residues in 1 library sequences Scomplib [version 3.3t05 March 30, 2000] start: Wed Mar 3 12:05:29 2004 done: Wed Mar 3 12:05:40 2004 Scan time: 0.117 Display time: 18.567

Function used was FASTA